



SEQUENCE LISTING

RECEIVED

APR 26 2001

TECH CENTER 1600/2900

<110> Danks, Mary K.
Potter, Philip M.
Houghton, Peter J.

<120> Compositions and Methods for Sensitizing and Inhibiting
Growth of Human Tumor Cells

<130> SJ-0005

<140> 09/595,682

<141> 2000-06-16

<150> 60/075,258

<151> 1998-02-19

<150> PCT/US99/03171

<151> 1999-02-12

<160> 30

<170> PatentIn Ver. 2.0

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1

5

10

15

Gly Lys Phe Val Ser Xaa Glu Gly Phe Ala Gln Pro Val Ala Lys Phe

20

25

30

Xaa Gly

<210> 2

<211> 36

<212> PRT

<213> *Oryctolagus cuniculus*

<400> 2

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Gly	Lys	Phe	Val	Ser	Leu	Glu	Gly	Phe	Ala	Gln	Pro	Val	Ala	Val	Phe
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<213> *Homo sapiens*

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Val	Leu	Gly	Lys	Phe	Val	Ser	Leu	Glu	Gly	Phe	Ala	Gln	Pro	Val	Ala
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<211> 54

<212> PRT

<213> *Rattus sp.*

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Trp Gly His Pro Ser Ser Pro Pro Val Val Asp Thr Thr Lys Gly Lys
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Val Leu Gly Lys Tyr Val Ser Leu Glu Gly Phe Thr Gln Pro Val Ala
35 40 45

Val Phe Leu Gly Val Pro
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<210> 5
<211> 54
<212> PRT
<213> Mus musculus

<400> 5
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Leu Gly His Ser Leu Leu Pro Pro Val Val Asp Thr Thr Gln Gly Lys
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Val Leu Gly Lys Tyr Ile Ser Leu Glu Gly Phe Glu Gln Pro Val Ala
35 40 45

Val Phe Leu Gly Val Pro
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<212> PRT
<213> Oryctolagus cuniculus

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<212> DNA
<213> Oryctolagus cuniculus

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<213> Oryctolagus cuniculus

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<210> 13
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<213> Oryctolagus cuniculus

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<212> PRT

<213> Rattus sp.

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<211> 30

<212> PRT

<213> Homo sapiens

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<210> 18
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<212> PRT
<213> Rattus sp.

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<210> 19
<211> 30
<212> PRT
<213> Mus musculus

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Leu Gly His Ser Leu Leu Pro Pro Val Val Asp Thr Thr Gln
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<213> Oryctolagus cuniculus

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<210> 21

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<212> PRT

<213> *Oryctolagus cuniculus*

<400> 21

Met Trp Leu Cys Ala Leu Ala Leu Ala Ser Leu Ala Ala Cys Thr Ala

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Trp Gly His Pro Ser Ala Pro Pro Val Val Asp Thr Val His Gly Lys

20 25 30

Val Leu Gly Lys Phe Val Ser Leu Glu Gly Phe Ala Gln Pro Val Ala

35 40 45

Val Phe Leu Gly Val Pro Phe Ala Lys Pro Pro Leu Gly Ser Leu Arg

50 55 60

Phe Ala Pro Pro Gln Pro Ala Glu Ser Trp Ser His Val Lys Asn Thr

65 70 75 80

Thr Ser Tyr Pro Pro Met Cys Ser Gln Asp Ala Val Ser Gly His Met

85 90 95

Leu Ser Glu Leu Phe Thr Asn Arg Lys Glu Asn Ile Pro Leu Lys Phe

100 105 110

Ser Glu Asp Cys Leu Tyr Leu Asn Ile Tyr Thr Pro Ala Asp Leu Thr

115 120 125

Lys Arg Gly Arg Leu Pro Val Met Val Trp Ile His Gly Gly Gly Leu
 130 135 140

Met Val Gly Gly Ala Ser Thr Tyr Asp Gly Leu Ala Leu Ser Ala His
 145 150 155 160

Glu Asn Val Val Val Val Thr Ile Gln Tyr Arg Leu Gly Ile Trp Gly
 165 170 175

Phe Phe Ser Thr Gly Asp Glu His Ser Arg Gly Asn Trp Gly His Leu
 180 185 190

Asp Gln Val Ala Ala Leu Arg Trp Val Gln Asp Asn Ile Ala Asn Phe
 195 200 205

Gly Gly Asp Pro Gly Ser Val Thr Ile Phe Gly Glu Ser Ala Gly Gly
 210 215 220

Gln Ser Val Ser Ile Leu Leu Leu Ser Pro Leu Thr Lys Asn Leu Phe
 225 230 235 240

His Arg Ala Ile Ser Glu Ser Gly Val Ala Leu Leu Ser Ser Leu Phe
 245 250 255

Arg Lys Asn Thr Lys Ser Leu Ala Glu Lys Ile Ala Ile Glu Ala Gly
 260 265 270

Cys Lys Thr Thr Thr Ser Ala Val Met Val His Cys Leu Arg Gln Lys
 275 280 285

Thr Glu Glu Glu Leu Met Glu Val Thr Leu Lys Met Lys Phe Met Ala
 290 295 300

Leu Asp Leu Val Gly Asp Pro Lys Glu Asn Thr Ala Phe Leu Thr Thr
 305 310 315 320

Val Ile Asp Gly Val Leu Leu Pro Lys Ala Pro Ala Glu Ile Leu Ala
 325 330 335

Glu Lys Lys Tyr Asn Met Leu Pro Tyr Met Val Gly Ile Asn Gln Gln
 340 345 350

Glu Phe Gly Trp Ile Ile Pro Met Gln Met Leu Gly Tyr Pro Leu Ser
 355 360 365

Glu Gly Lys Leu Asp Gln Lys Thr Ala Thr Glu Leu Leu Trp Lys Ser
 370 375 380

Tyr Pro Ile Val Asn Val Ser Lys Glu Leu Thr Pro Val Ala Thr Glu
 385 390 395 400
 Lys Tyr Leu Gly Gly Thr Asp Asp Pro Val Lys Lys Lys Asp Leu Phe
 405 410 415
 Leu Asp Met Leu Ala Asp Leu Leu Phe Gly Val Pro Ser Val Asn Val
 420 425 430
 Ala Arg His His Arg Asp Ala Gly Ala Pro Thr Tyr Met Tyr Glu Tyr
 435 440 445
 Arg Tyr Arg Pro Ser Phe Ser Ser Asp Met Arg Pro Lys Thr Val Ile
 450 455 460
 Gly Asp His Gly Asp Glu Ile Phe Ser Val Leu Gly Ala Pro Phe Leu
 465 470 475 480
 Lys Glu Gly Ala Thr Glu Glu Glu Ile Lys Leu Ser Lys Met Val Met
 485 490 495
 Lys Tyr Trp Ala Asn Phe Ala Arg Asn Gly Asn Pro Asn Gly Glu Gly
 500 505 510
 Leu Pro Gln Trp Pro Ala Tyr Asp Tyr Lys Glu Gly Tyr Leu Gln Ile
 515 520 525
 Gly Ala Thr Thr Gln Ala Ala Gln Lys Leu Lys Asp Lys Glu Val Ala
 530 535 540
 Phe Trp Thr Glu Leu Trp Ala Lys Glu Ala Ala Arg Pro Arg Glu Thr
 545 550 555 560
 Glu His Ile Glu Leu
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<210> 22

<211> 6

<212> DNA

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<223> Description of Artificial Sequence: Synthetic

<400> 22

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<210> 23
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<400> 23
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<210> 24
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<400> 24
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<210> 25
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<400> 25
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<210> 26
<211> 543
<212> PRT
<213> Oryctolagus cuniculus

<400> 26
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Trp Gly His Pro Ser Ala Pro Pro Val Val Asp Thr Val His Gly Lys
20 25 30
Val Leu Gly Lys Phe Val Ser Leu Glu Gly Phe Ala Gln Pro Val Ala
35 40 45

Val	Phe	Leu	Gly	Val	Pro	Phe	Ala	Lys	Pro	Pro	Leu	Gly	Ser	Leu	Arg	50	55	60	
Phe	Ala	Pro	Pro	Gln	Pro	Ala	Glu	Ser	Trp	Ser	His	Val	Lys	Asn	Thr	65	70	75	80
Thr	Ser	Tyr	Pro	Pro	Met	Cys	Ser	Gln	Asp	Ala	Val	Ser	Gly	His	Met	85	90	95	
Leu	Ser	Glu	Leu	Phe	Thr	Asn	Arg	Lys	Glu	Asn	Ile	Pro	Leu	Lys	Phe	100	105	110	
Ser	Glu	Asp	Cys	Leu	Tyr	Leu	Asn	Ile	Tyr	Thr	Pro	Ala	Asp	Leu	Thr	115	120	125	
Lys	Arg	Gly	Arg	Leu	Pro	Val	Met	Val	Trp	Ile	His	Gly	Gly	Gly	Leu	130	135	140	
Met	Val	Gly	Gly	Ala	Ser	Thr	Tyr	Asp	Gly	Leu	Ala	Leu	Ser	Ala	His	145	150	155	160
Glu	Asn	Val	Val	Val	Val	Thr	Ile	Gln	Tyr	Arg	Leu	Gly	Ile	Trp	Gly	165	170	175	
Phe	Phe	Ser	Thr	Gly	Asp	Glu	His	Ser	Arg	Gly	Asn	Trp	Gly	His	Leu	180	185	190	
Asp	Gln	Val	Ala	Ala	Leu	Arg	Trp	Val	Gln	Asp	Asn	Ile	Ala	Asn	Phe	195	200	205	
Gly	Gly	Asp	Pro	Gly	Ser	Val	Thr	Ile	Phe	Gly	Glu	Ser	Ala	Gly	Gly	210	215	220	
Gln	Ser	Val	Ser	Ile	Leu	Leu	Leu	Ser	Pro	Leu	Thr	Lys	Asn	Leu	Phe	225	230	235	240
His	Arg	Ala	Ile	Ser	Glu	Ser	Gly	Val	Ala	Leu	Leu	Ser	Ser	Leu	Phe	245	250	255	
Arg	Lys	Asn	Thr	Lys	Ser	Leu	Ala	Glu	Lys	Ile	Ala	Ile	Glu	Ala	Gly	260	265	270	
Cys	Lys	Thr	Thr	Thr	Ser	Ala	Val	Met	Val	His	Cys	Leu	Arg	Gln	Lys	275	280	285	
Thr	Glu	Glu	Glu	Leu	Met	Glu	Val	Thr	Leu	Lys	Met	Lys	Phe	Met	Ala	290	295	300	

Leu	Asp	Leu	Val	Gly	Asp	Pro	Lys	Glu	Asn	Thr	Ala	Phe	Leu	Thr	Thr	305	310	315	320
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Glu	Lys	Lys	Tyr	Asn	Met	Leu	Pro	Tyr	Met	Val	Gly	Ile	Asn	Gln	Gln	340	345	350	
Glu	Phe	Gly	Trp	Ile	Ile	Pro	Met	Gln	Met	Leu	Gly	Tyr	Pro	Leu	Ser	355	360	365	
Glu	Gly	Lys	Leu	Asp	Gln	Lys	Thr	Ala	Thr	Glu	Leu	Leu	Trp	Lys	Ser	370	375	380	
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Ala	Arg	His	His	Arg	Asp	Ala	Gly	Ala	Pro	Thr	Tyr	Met	Tyr	Glu	Tyr	435	440	445	
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Lys	Glu	Gly	Ala	Thr	Glu	Glu	Glu	Ile	Lys	Leu	Ser	Lys	Met	Val	Met	485	490	495	
Lys	Tyr	Trp	Ala	Asn	Phe	Ala	Arg	Asn	Gly	Asn	Pro	Asn	Gly	Glu	Gly	500	505	510	
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<211> 2191

<212> DNA

<213> Homo sapiens

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<211> 559

<212> PRT

<213> Homo sapiens

<400> 28

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Ile	Arg	Thr	Thr	His	Thr	Gly	Gln	Val	Leu	Gly	Ser	Leu	Val	His	Val	35	40	45	
Lys	Gly	Ala	Asn	Ala	Gly	Val	Gln	Thr	Phe	Leu	Gly	Ile	Pro	Phe	Ala	50	55	60	
Lys	Pro	Pro	Leu	Gly	Pro	Leu	Arg	Phe	Ala	Pro	Pro	Glu	Pro	Pro	Glu	65	70	75	80
Ser	Trp	Ser	Gly	Val	Arg	Asp	Gly	Thr	Thr	His	Pro	Ala	Met	Cys	Leu	85	90	95	
Gln	Asp	Leu	Thr	Ala	Val	Glu	Ser	Glu	Phe	Leu	Ser	Gln	Phe	Asn	Met	100	105	110	
Thr	Phe	Pro	Ser	Asp	Ser	Met	Ser	Glu	Asp	Cys	Leu	Tyr	Leu	Ser	Ile	115	120	125	
Tyr	Thr	Pro	Ala	His	Ser	His	Glu	Gly	Ser	Asn	Leu	Pro	Val	Met	Val	130	135	140	
Trp	Ile	His	Gly	Gly	Ala	Leu	Val	Phe	Gly	Met	Ala	Ser	Leu	Tyr	Asp	145	150	155	160
Gly	Ser	Met	Leu	Ala	Ala	Leu	Glu	Asn	Val	Val	Val	Val	Ile	Ile	Gln	165	170	175	
Tyr	Arg	Leu	Gly	Val	Leu	Gly	Phe	Phe	Ser	Thr	Gly	Asp	Lys	His	Ala	180	185	190	
Thr	Gly	Asn	Trp	Gly	Tyr	Leu	Asp	Gln	Val	Ala	Ala	Leu	Arg	Trp	Val	195	200	205	
Gln	Gln	Asn	Ile	Ala	His	Phe	Gly	Gly	Asn	Pro	Asp	Arg	Val	Thr	Ile	210	215	220	
Phe	Gly	Glu	Ser	Ala	Gly	Gly	Thr	Ser	Val	Ser	Ser	Leu	Val	Val	Ser	225	230	235	240
Pro	Ile	Ser	Gln	Gly	Leu	Phe	His	Gly	Ala	Ile	Met	Glu	Ser	Gly	Val	245	250	255	

Ala	Leu	Leu	Pro	Gly	Leu	Ile	Ala	Ser	Ser	Ala	Asp	Val	Ile	Ser	Thr	260	265	270	
Val	Val	Ala	Asn	Leu	Ser	Ala	Cys	Asp	Gln	Val	Asp	Ser	Glu	Ala	Leu	275	280	285	
Val	Gly	Cys	Leu	Arg	Gly	Lys	Ser	Lys	Glu	Glu	Ile	Leu	Ala	Ile	Asn	290	295	300	
Lys	Pro	Phe	Lys	Met	Ile	Pro	Gly	Val	Val	Asp	Gly	Val	Phe	Leu	Pro	305	310	315	320
Arg	His	Pro	Gln	Glu	Leu	Leu	Ala	Ser	Ala	Asp	Phe	Gln	Pro	Val	Pro	325	330	335	
Ser	Ile	Val	Gly	Val	Asn	Asn	Asn	Glu	Phe	Gly	Trp	Leu	Ile	Pro	Lys	340	345	350	
Val	Met	Arg	Ile	Tyr	Asp	Thr	Gln	Lys	Glu	Met	Asp	Arg	Glu	Ala	Ser	355	360	365	
Gln	Ala	Ala	Leu	Gln	Lys	Met	Leu	Thr	Leu	Leu	Met	Leu	Pro	Pro	Thr	370	375	380	
Phe	Gly	Asp	Leu	Leu	Arg	Glu	Glu	Tyr	Ile	Gly	Asp	Asn	Gly	Asp	Pro	385	390	395	400
Gln	Thr	Leu	Gln	Ala	Gln	Phe	Gln	Glu	Met	Met	Ala	Asp	Ser	Met	Phe	405	410	415	
Val	Ile	Pro	Ala	Leu	Gln	Val	Ala	His	Phe	Gln	Cys	Ser	Arg	Ala	Pro	420	425	430	
Val	Tyr	Phe	Tyr	Glu	Phe	Gln	His	Gln	Pro	Ser	Trp	Leu	Lys	Asn	Ile	435	440	445	
Arg	Pro	Pro	His	Met	Lys	Ala	Asp	His	Gly	Asp	Glu	Leu	Pro	Phe	Val	450	455	460	
Phe	Arg	Ser	Phe	Phe	Gly	Gly	Asn	Tyr	Ile	Lys	Phe	Thr	Glu	Glu	Glu	465	470	475	480
Glu	Gln	Leu	Ser	Arg	Lys	Met	Met	Lys	Tyr	Trp	Ala	Asn	Phe	Ala	Arg	485	490	495	
Asn	Gly	Asn	Pro	Asn	Gly	Glu	Gly	Leu	Pro	His	Trp	Pro	Leu	Phe	Asp	500	505	510	

Gln Glu Glu Gln Tyr Leu Gln Leu Asn Leu Gln Pro Ala Val Gly Arg
515 520 525

Ala Leu Lys Ala His Arg Leu Gln Phe Trp Lys Lys Ala Leu Pro Gln
530 535 540

Lys Ile Gln Glu Leu Glu Glu Pro Glu Glu Arg His Thr Glu Leu
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<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic

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<210> 30

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic

<400> 30

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31